

A2
(cont'd)

providing a sapphire gas discharge tube having an outer surface; and
passing a flow of air over at least a portion of the outer surface of the gas discharge
tube.

A3

13. (once amended) A gas discharge detector comprising:
a sapphire gas discharge tube;
a power source for providing energy to the gas discharge tube; and
an apparatus for air cooling the gas discharge tube.

A4

17. (once amended) The detector of claim 15 wherein the apparatus for air
cooling the gas discharge tube includes an on board air pump.

18. (once amended) The detector of claim 15 wherein the apparatus for air
cooling the gas discharge tube includes a central compressor.

REMARKS

Claims 1-5, 7-15, and 17-20 are pending. By this amendment, claims 1, 7, 8, 9, 13, 17 and 18 are amended and claims 6 and 16 are deleted. No new matter is introduced. Claims 7 and 8 and 17 and 18, originally dependant on deleted claims 6 and 16 respectively, are amended so that they are dependent on a pending claim. Support for the amendments made to claims 1, 9, and 13 may be found in the specification and claims as originally filed. Reconsideration and allowance of the claims in view of the above amendments and remarks that follow is respectfully requested.

Claim Rejections- 35 USC § 102

Claims 9, 12-14 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,086,255 to Okamoto ("Okamoto"). Claims 9 and 13, independent claims, are amended to recite a "sapphire" gas discharge tube. Claims 12 and 14 are dependant from claims 9 and 13 respectively. The recitation of "sapphire" is taken from canceled claims 6 and 16, a feature which the Office Action indicates is not present in Okamoto. Therefore, the Applicant asserts that Okamoto does not anticipate claims 9, 12-14. as amended.

Claim Rejections- 35 USC § 103

The remaining claims stand rejected under 35 U.S.C. 103(a). All three independent claims (1, 9, and 13) are amended to recite a "sapphire" gas discharge tube, therefore all of the pending claims recite this feature. Since the recitation of this feature is taken from canceled claims 6 and 16, the following remarks address the rejection of those claims but apply to all of the pending claims.

Claim 6 and 16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto in view of U.S. Patent 5,216,330 to Ahonen ("Ahonen") in further view of U.S.